## **REMARKS**

Applicants respectfully request entrance of the above claim amendments and claim cancellations. Upon entrance of the above amendments and cancellations, claims 1, 4-5 and 7-13 are pending in the application. Applicants respectfully submit that the above claim amendments do not present new matter.

Claim 1 has been amended to recite the language from claims 2, 3 and 6, which have accordingly been canceled.

Claims 4-5 and 7-11 have been amended to depend from claim 1--claim 2 having been canceled.

# Claim Rejections - 35 U.S.C. § 112

The Office Action rejected claims 1-13 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. As basis for the rejection, the Office Action alleges:

The claims have been amended to recite a "dynamic database". Support for a system comprising a "dynamic database" is found in the originally filed specification on page 4, lines 1-4. However, a definition of a "dynamic database" is not disclosed anywhere in the originally filed specification. The term "dynamic" has several As applied to a database, Merriam-Webster's Dictionary defines "dynamic" to mean "requiring periodic refreshment of charge in order to retain data." The instant specification, however, does not disclose anything with regard to "charging" a database. The specification discloses, on page 9 et seq., that a user may add data to a database and that a simulation module may receive data from the database, therefore the originally filed specification appears to disclose that a "dynamic" database is merely one which is capable of change. As the meaning intended by applicant for a "dynamic database" is unclear, one skilled in the art would not know the metes and bounds intended by applicant for the claimed "dynamic database". For these reasons, the claims are indefinite. Based on the disclosure of the specification, the examiner interprets a "dynamic database" to be one which is capable of change.

Applicants respectfully submit that the term "dynamic database", as used for its ordinary meaning, would be clear to someone of skill in the pertinent art and this clarity provides the metes

and bounds intended by the Applicants. Further, even if the term "dynamic database" would not be clear to one of skill in the art from its ordinary usage, the specification provides ample disclosure, teaching and examples to provide one of skill in the art with the metes and bounds intended by the term "dynamic database."

For example, the specification discloses and teaches that the database is dynamic in that a User is capable of adding, removing and changing data contained in the dynamic database (*See* page 7, lines 1-3 and page 9, lines 4-7 and 15-17, *inter alia*). Another dynamic characteristic taught and disclosed by the specification is that the dynamic database does not necessarily utilize pre-developed pathways coded into the dynamic database (*See* page 10, lines 3-11, *inter alia*). Rather than utilizing a set of static (*i.e.*, non-dynamic) pathways, the pathways may be built at run-time by the inference engines with components of the pathways located in the dynamic database (*See* page 11, line 8 through page 15, line 15, *inter alia*). Further, the specification teaches and discloses a database that is dynamic in that the system is capable of changing properties of data in the database during simulation based on pathway events without any user input (*See* page 3, lines 5-11; page 4, lines 1-4; page 10, lines 3-11; and page 11, line 8 though page 15, line 15, *inter alia*).

For at least the foregoing reasons, Applicants respectfully submit that the term "dynamic database" is definite and clearly sets the metes and bounds of the recited subject matter in view of the ordinary usage of the term, further in view of the teaching, disclosure and examples of the specification. Applicants respectfully traverse the rejection of claims 1-13 under 35 U.S.C. § 112, second paragraph.

### Claim Rejections - 35 U.S.C. § 102

#### Karp et al.

The Office Action rejected claims 1-5 and 7-8 under 35 U.S.C. § 102(b) as allegedly being

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anticipated by Karp et al., HinCyc: A Knowledge Base of the Complete Genome and Metabolic Pathways of H. influenzae, ISMB-96, pp. 116-124 ("Karp et al.").

Claim 6, *inter alia*, was not rejected by the Office Action as being anticipated by Karp et al.

Claim 1 has been amended to include the novel elements and features of claim 6 (and intervening claim 2). Accordingly, Applicants respectfully submit that claim 1—and pending claims 4-5 and 7-8, which are dependent therefrom—is likewise not anticipated by Karp et al.

For at least the foregoing reasons, Applicants respectfully submit that the invention recited in claims 1, 4-5 and 7-8 even more clearly distinguishes over Karp et al.

### Thalhammer-Revero

The Office Action rejected claims 1-2 and 6-13 under 35 U.S.C. §§ 102(a) and (e) as allegedly being anticipated by U.S. Patent No. 5,930,154, issued to Thalhammer-Reyero ("Thalhammer-Reyero).

Claim 3, *inter alia*, was not rejected by the Office Action as being anticipated by Thalhammer-Reyero. Claim 1 has been amended to include the novel elements and features of claim 3 (and intervening claim 2). Accordingly, Applicants respectfully submit that claim 1—and pending claims 7-13, which are dependent therefrom—is likewise not anticipated by Thalhammer-Reyero.

For at least the foregoing reasons, Applicants respectfully submit that the invention recited in claims 1 and 7-13 even more clearly distinguishes over Thalhammer-Reyero.

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# **CONCLUSION**

All pending claims consequently distinguish over the references applied in the Office Action. This application is therefore in condition for allowance, acknowledgment of which the applicants respectfully solicit. Should, however, the Examiner discover any remaining issues before allowance, the Examiner is kindly invited to contact the undersigned by telephone to expedite the resolution of the same.

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required now or hereafter, or credit any overpayment, to Deposit Account No. 50-0206.

Data

By:

-7-W

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Respectfully submitted,

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